

ABSTRACT

**METHOD OF, AND RECEIVER FOR, DETECTING THE PRESENCE
OF DATA**

5

A method of, and a receiver for, detecting the presence of digitally modulated data signals in which the receiver is periodically energised to detect the presence of the signals. The received signals/noise are converted using a quadrature frequency translation stage (16, 17, 18) into a complex signal which after differential decoding (28) contain n samples for each transmitted bit. A running sum of successive groups of m samples, where $m < n$, is obtained and an absolute value (X_i) of each group is derived. A weighting value (W_i) is selected by comparing each absolute value with predetermined statistics of expected values and the weighting value selected is multiplied by the associated absolute value to produce a product (S). The product is compared in a comparator (56) with a further threshold level (58) to derive an indication of the presence of data in the received signals. If the indication is negative the receiver is powered down to save power.

20 (Figure 1)